

Protocol for organization of the AT4 Community

We attempt to reconcile the divergent impulses of (1) sustaining the accountability of the AT4 facility to a fair response to national needs, and (2) the responsibility and authority of the principal investigator for the intellectual productivity of his local program and of a community of close collaborators.

In part we have responded to these concerns by specifying a prenegotiated allocation of the SUPEX facility to the local DENDRAL project and to AT4 respectively. As discussed already, the 50% allocation is based on the initial configuration (2) includes latitude for system effort and for informal and preliminary associations (3) and could be reevaluated (i.e. negotiated between AT4 and DENDRAL) at the point of any augmentation of the facility. We do not imply that DENDRAL would have an automatic claim to 50% or any other moiety of resources justified in terms of demands from the AT4 community. Alternatively, DENDRAL should be allowed to compete, without prejudice, for such incremental facilities.

The National Committee (NCAT4) should have the final authority for the selection of AT4 users and in the disposition of the SUPEX resources designated for that community. This includes not only the machine cycles but also a pro rata part of the personnel effort listed on p. 92. (Many of the

listed individuals serve, at a system level, the needs of both sectors.)

The P.I. is responsible to the NEATM for fulfilling the contractual obligations of sharing the SUMEX resource. He will report regularly to NEATM, and this institution will report to BRB concerning the adequacy of fulfillment. BRB is free has the right and responsibility to ^{investigate even} inspect the funding of the SUMEX resource in the event of an adverse report; indeed it would have the right to recover damages (as it can with other grants) in the event of flagrant violations of the grant instrument so accepted by the ministry.

The deterrence of such an adverse report is a powerful and obvious incentive to ensure compliance with mutually agreed objectives.

In discharging his responsibility the P.I. will appoint a Facility Director and a Liaison Coordinator who are instructed to carry out these policies and to maintain close communication with the users and with NEATM. The P.I. will not be a passive instrument but will take an active role in recruiting ^{users} candidates for admission to the ATM community, and in sustaining a high level of communication with and among them.

X Major system software policies will be established by the NCAC by May 1989 and not only by their immediate impact on the DENDRAL and ATM sectors, but their overall effect on the general development of AI research. Likewise, the ATM effort will seek to recruit other centers to cooperate (without ^{new} ~~new~~ ~~new~~) by making long range commitments (the Sunex) in these software efforts on the net, and to ^{share} ~~join~~ ad hoc back-ups and other machine resources.

We believe that many more potential users can be found than we have identified as yet — and indeed who ^{will} ~~will~~ recruit and defend their projects prior to the authentication ~~of~~ that a service will be provided. We will not, therefore, preselect the user group until the faculty has been advertised and proposals have been formulated, although we have identified some promising candidates. Some of the conflict-of-interest difficulties that will affect this process are obvious and are an important reason for leaving the first selection to a ^{unbiased} ~~process~~ that ^{has} ~~been~~ reviewed by the Study Section and the NAPRC.

The criteria for user selection ~~will~~ ^{not} be ~~an~~ ad hoc, relating essentially to the originality and cogency of the proposer, and the relevance of his proposal to the general mission of AI in M. Indeed, this

parallels what study sections generally must now do - which ~~the~~ requires much more judgment than algorithm. However, the mutual compatibility ~~or~~ ~~and~~ rather reinforcement of the effects of the prospective uses should be an important criterion.

Compatibility may be needed ^{the most} for efficient cooperation, (creative summation) e.g. at the level of languages; complementarity will add to the overall power of the repertoires of the subprograms and conceptual approaches available to the group. In addition, a number of other uses ~~need~~ ^{also} be coopted who supply diverse & high return of useful research in proportion to the ~~cost~~ resources (computer cycles, administrators, and intellectual attention) that they consume.

The user groups should be selected by ~~a~~ ^{initial} 7-member Organizing Committee whose membership can be designated as follows:

2 members - to be named by BRB
Alan Newell }
Selfridge } past members of the
Language } Study Section,
Flegenbaum
Amarel.

~~After~~ The OCAIM will advertise the facility (with ~~info~~ staff support from SUCC), and review proposals ~~\$90~~ ~~now~~ days later.) This interval will be needed ^{approx.} to check out the network service to a reasonable level.

of utility to the project designate.
At that time, NCATM will ~~select~~ the initial usergroup, the ground rules of their relationship to SUMEX, the initial ground rules for NCATM, and the initial membership of NCATM. The ongoing committee, NCATM, may now include users whose role in AT4 has been severely reduced by the OC. We propose that NCATM include six members:

- 1 - representing SUMEX
- 3 - representing other users
- 2 - from NCATM or other non-user group.

(The details of these numbers are of course negotiable.) We need a committee large enough to ~~retain~~ a representative quorum despite occasional absences, small enough to meet often (6-8 times per year) and decisively.

NCATM would rotate its membership, replacing 2 each year, by nominating a slate for approval by BRB.

Besides continuing the process of user selection and information, and monitoring the ^{service standards & etc} accountability of SUMEX, NCATM would also establish other linking relationships at various levels to advise SUMEX management on its programs of systems and language support, user education, documentation, conferences involving large segments of the computer

sciences and medical research communities.

We believe that NCAAM will promptly recruit a considerable group of users